

TSR Please

# Work Order ID 48361



July 1, 2009 7:34:01 AM

Item ID: D3460-3

Accept



Setup Start



Revision ID: A

Stop



Item Name: Wearshoe

Start Date: 07/15/2009 Start Qty: 6.00



Cust Item ID:

Required Date: 08/03/2009 Req'd Qty: 6.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3460

Rev A

100

0.00



Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg

Dwg Rev: E-1

Prog Rev: E-1

2-Deburr if necessary

w/o A rev  
Flat pattern  
DWG for  
BS77-101

=> ml 09 07 17 (6)

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

=> ml 09 07 17 (6)

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Page 2

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Customer:

Reference:

Run Start



Approvals: Process Plan: Date: Tooling: Date:

Stop



QC: Date: SPC (Y/N): Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

=> 8 07/15/09

6

f

130

0.00



Brake NC

Memo

0.00

Brake NC

Form using DT8155 and DT8179 as per Dwg D2577

Form Detail "A" joggle using DT8157 per dwg D3460-3

SB 09/07/20

6

f

140

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

=> 8 07/15/09

6

f

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Page 3

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Required Date: 08/03/2009 Req'd Qty: 6.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

150

0.00



Large Fab

Memo

0.00

Large Fab

Weld hardface using DT8308A & DT8308B as per dwg D3460

A/R 7560 Hardcoat Rod Batch: M109413

EL 7-7-21

160

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

=> S 02/07/21

(6) f

170

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00



Powdercoat

Memo

0.00

Powder Coating

START 7:45.  
TEMPS. 300  
FW 512 845

BR 07-07-22 @

# Work Order ID 48361

July 1, 2009 7:34:01 AM

Page 4

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Required Date: 08/03/2009 Req'd Qty: 6.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

180

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

190

Identify as per dwg & Stock Location: \_\_\_\_\_

0.00



Packaging

Memo

0.00

Packaging

200

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control



=> 509/07/02

(46)

0

09/17/02 (3)

09/07/22

W 09.07.22

# Picklist Print

July 1, 2009 7:34:00 AM

Page 1

Work Order ID: 48361

Parent Item: D3460-3RevA

Parent Item Name: Wearshoe

Comments:

Start Date: 07/15/2009

Required Date: 08/03/2009

Start Qty: 6.00

Required Qty: 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M1010S16GA		Purchased	No			100	sf	116.6000	4.9800			



1010/1025 sheet 16GA



Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

MAT

116.6

105706

0.6

111410

116

MM 08 07 17

Date: Wednesday, 03/06/2009 10:49:01 AM  
 User: Julie Dawson

## Process Sheet

<b>Customer</b> :	CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> :	WEARPLATE
<b>Job Number</b> :	48361		
<b>Estimate Number</b> :	10621		
<b>P.O. Number</b> :		<b>Part Number</b> :	D34603
<b>This Issue</b> :	03/06/2009	<b>S.O. No.</b> :	
<b>Prsht Rev.</b> :	NC	<b>Drawing Number</b> :	D3460 / D2577
<b>First Issue</b> :	//	<b>Project Number</b> :	N/A
<b>Previous Run</b> :	46370	<b>Drawing Revision</b> :	A / E
	<b>Type</b> :	<b>Material</b> :	
	SMALL / MED FAB	<b>Due Date</b> :	19/06/2009
<b>Written By</b> :		<b>Qty:</b>	6 Um: Each
<b>Checked &amp; Approved By</b> :	<u>JLD 09-06-03</u>		
<b>Comment</b> :	Est: A 05.10.20 New Issue KJ/EC Est: B 06.03.01 Removed joggle on end EC Est Rev: C 09-03-10 now made on waterjet DD verified by: EC		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M1010S16GA	1010/1025 sheet 16GA
-----	------------	----------------------



**Comment:** Qty.: 0.8353 sf(s)/Unit Total : 5.0117 sf(s)  
 1010/1025 sheet 16GA  
 batch: 111410

ml 09 07 17 (6)

2.0	WATER JET	FLOW WATER JET
-----	-----------	----------------



**Comment:** FLOW WATER JET  
 1-Cut as per Dwg D3460/D2577 \*\*\*\*\*use prog. D2577-101\*\*\*\*\*  
 Dwg Rev: E w/o Rev P  
 Prog Rev: E Flat pattern  
Dwg 2577-101

2-Deburr if necessary

ml 09 07 17 (6)

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



**Comment:** INSPECT PARTS AS THEY COME OFF MACHINE

ml 09 07 17 (6)

4.0	QC8	SECOND CHECK
-----	-----	--------------



**Comment:** SECOND CHECK

S 07/07/20 (6)

5.0	BRAKE NC	NC BRAKE
-----	----------	----------



**Comment:** NC BRAKE

1- Form on brake using DT8155 and DT8179 as per Dwg D2577 Rev: A/E  
 2- Form Detail "A" joggle using DT8157 as per Dwg D3460 Rev: A/E  
 Identify as D3460-3

S 09/07/20 (6)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Wednesday, 03/06/2009 10:49:01 AM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 48361

Part Number: D34603

Job Number:



Seq. #: Machine Or Operation: Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 09/07/20 (x6)

7.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld hard surface using DT8308A & DT8308B as per Dwg D3460 Rev: A

Qty Part Number Description Batch

A/R N/A 7560 Hardcoat Rod

ML07813

A 9-7-21

8.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

S 09/07/21 (x6)

9.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

START TIME:

7:45

OVEN TEMPERATURE:

320°

FINISH TIME:

8:15

BR 09-07-22 (6)

10.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

S 09/07/22 (x6)

11.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

12.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion





W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

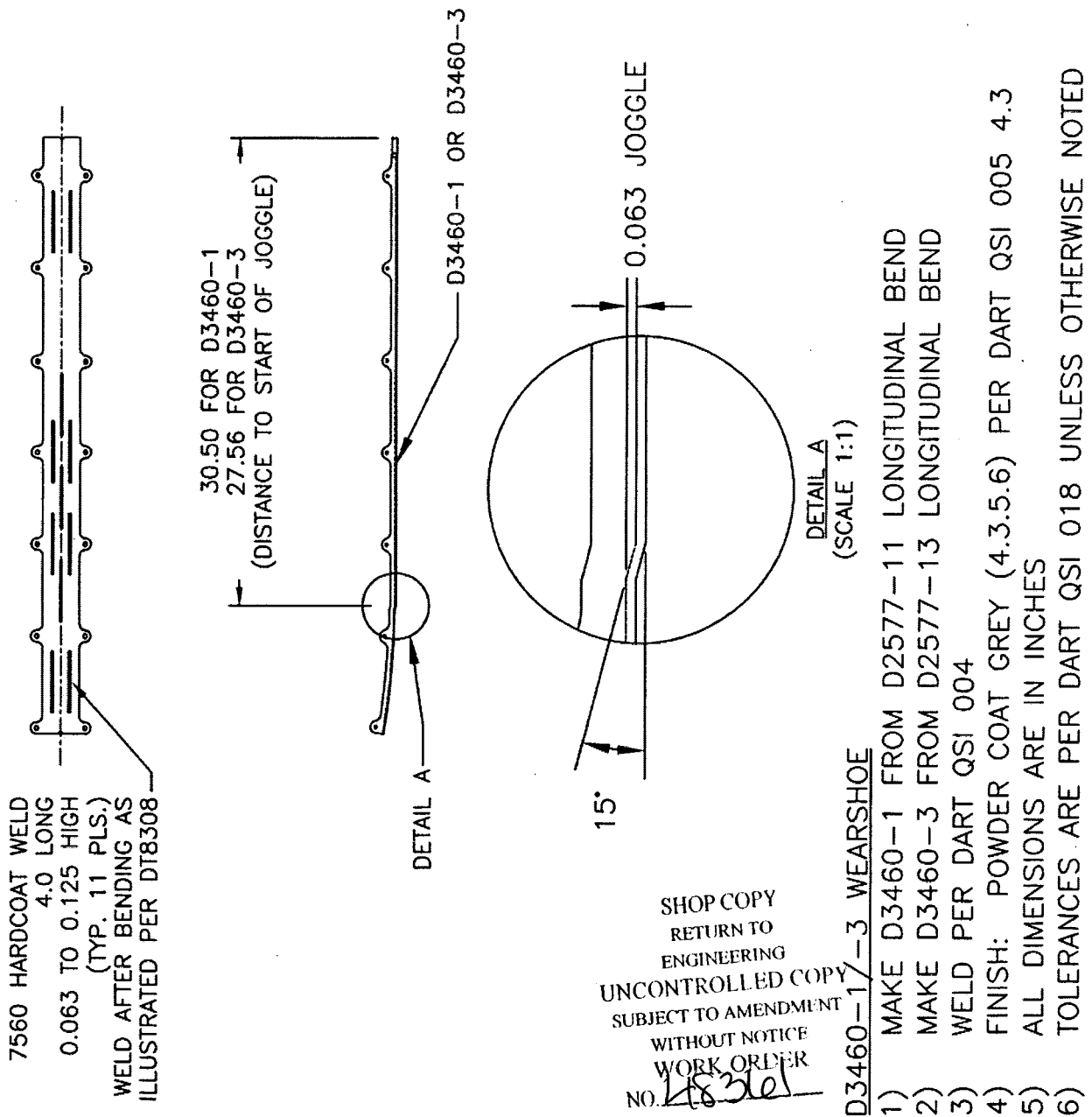


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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3460	REV. A SHEET 1 OF 1
DATE 05.10.04		TITLE WEARSHOE	SCALE 1:10
A	05.10.04	NEW ISSUE	

**RELEASED**

05.11.14



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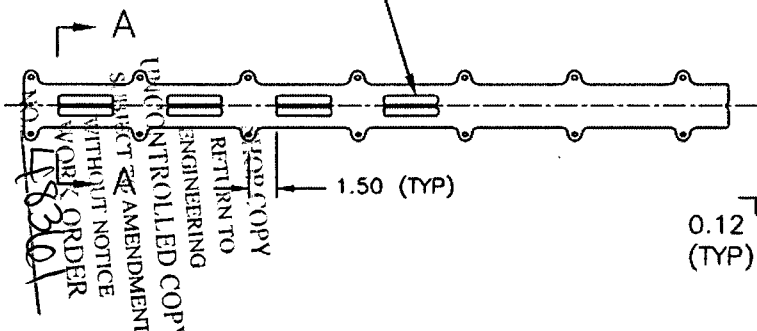
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CHECKED	APPROVED	DRAWING NO.
<i>[Signature]</i>	<i>[Signature]</i>	D2577
DATE		TITLE
00.09.22		WEARSHOE
A	96.09.16	NEW ISSUE
B	96.12.04	ADD HARDCOAT WELDS
C	97.05.30	CHANGE HOLES TO OBROUNDS
D	98.08.17	CORRECTED DIMENSIONS ON -1 & -3
E	00.09.22	ADD D2577-101/-11/-13 INCORPORATE DE09176

7560 HARDCOAT WELD  
4.0 LONG  
0.063 TO 0.125 HIGH  
(TYP. 11 PLS.)  
WELD AFTER BENDING AS  
ILLUSTRATED PER DT8308

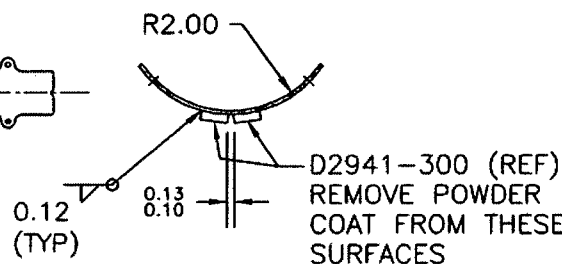


D2577-1 & D2577-3 WEARSHOE  
MAKE FROM D2577-11 AND D2577-13 RESPECTIVELY  
FINISH: POWDER COAT GREY (4.3.5.6) PER DART QSI 005 4.3  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

D2941-300  
SHWAYDER WEAPADS  
(8 PLACES)



SECTION A-A  
SCALE 1:5



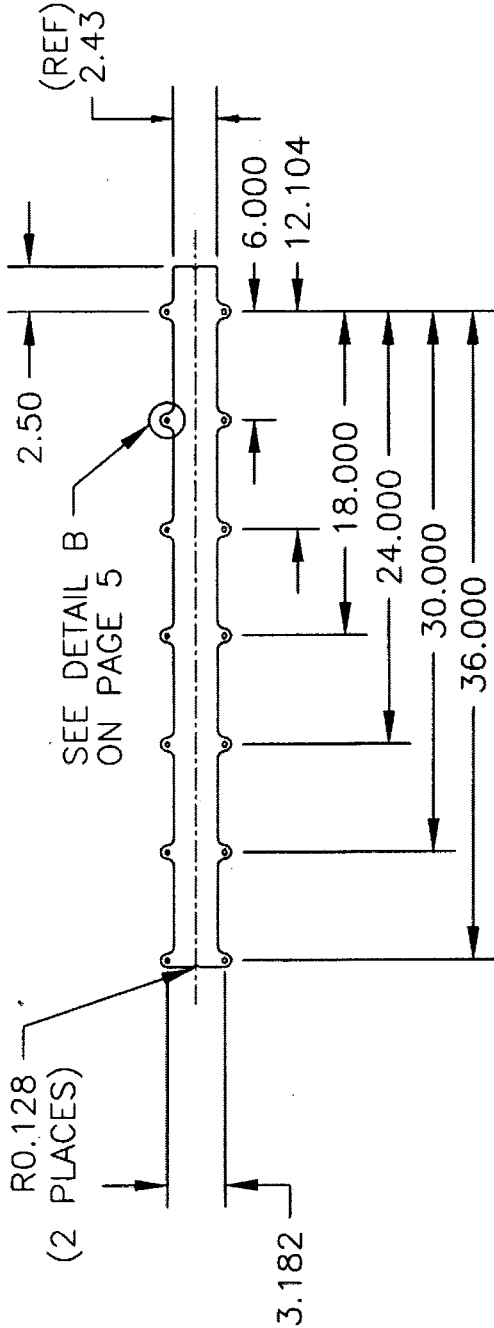
D2577-21 & D2577-23 WEARSHOE  
MAKE FROM D2577-11 AND D2577-13 RESPECTIVELY  
FINISH: POWDER COAT GREY (4.3.5.6) PER DART QSI 005 4.3  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

**DART**



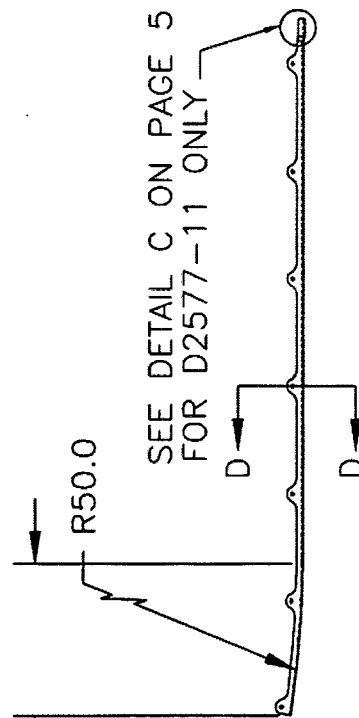
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DATE 00.09.22		TITLE WEARSHOE	SCALE 1:10

**RELEASED**  
00 09 26 #



**D2577-101 FLAT PATTERN**

BREAK ALL SHARP CORNERS 0.010 TO 0.020  
MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570  
SERIES STEEL 0.063 THICK  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



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WORK ORDER  
NO. 48301

**D2577-11 & D2577-13 LONGITUDINAL BEND**  
MAKE FROM D2577-101  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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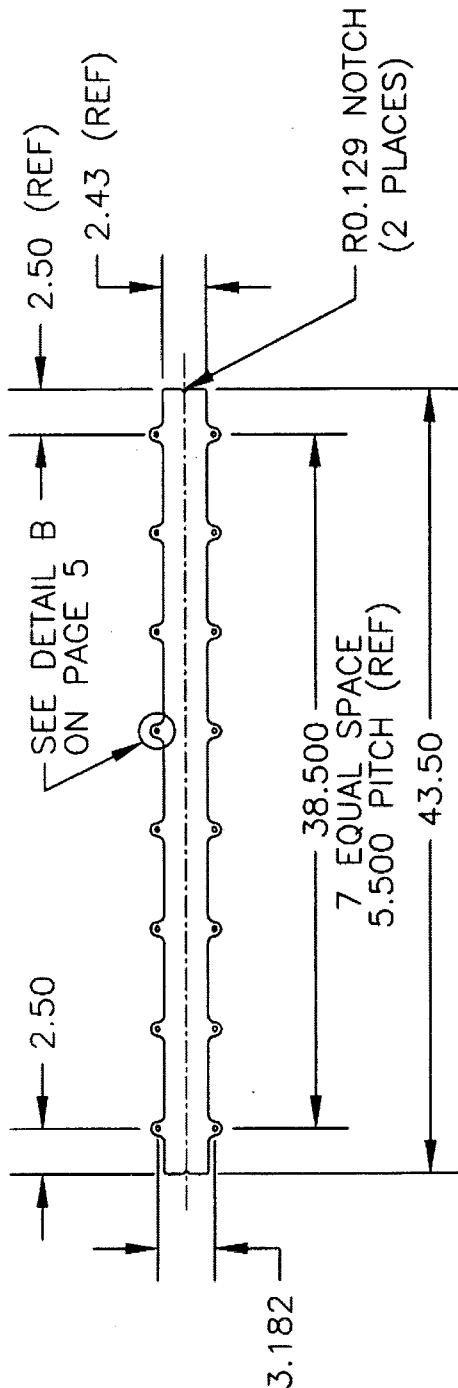
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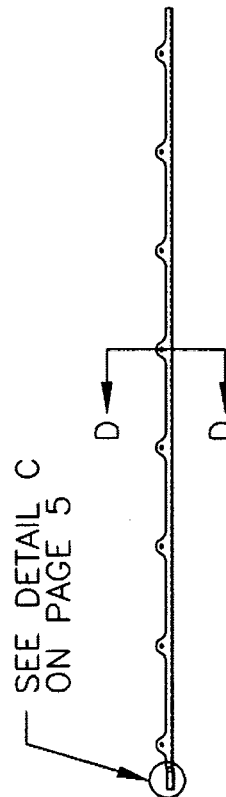
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DATE 00.09.22	TITLE WEARSHOE		SCALE 1:10

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D2577-5 FLAT PATTERN



D2577-5 LONGITUDINAL BEND



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NO. 48361

D2577-5 WEARSHOE  
BREAK ALL SHARP CORNERS 0.010 TO 0.020  
MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570  
SERIES STEEL 0.063 THICK  
FINISH: POWDER COAT GREY (4.3.5.6) PER DART QSI 005 4.3  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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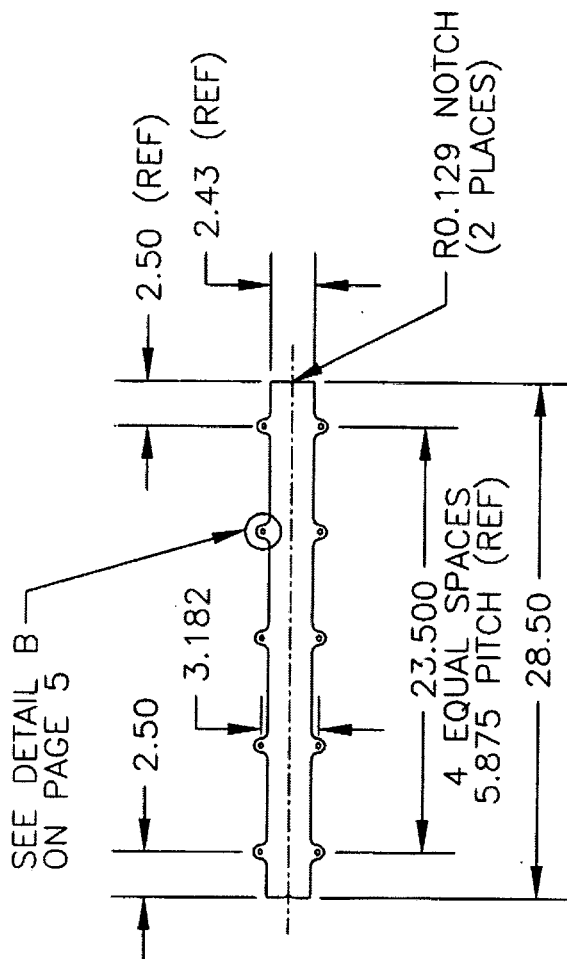
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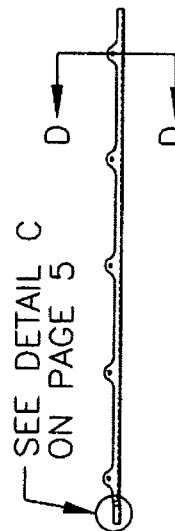
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DATE 00.09.22		TITLE WEARSHOE	SCALE 1:10

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D2577-7 FLAT PATTERN



D2577-7 LONGITUDINAL BEND



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NO. 4836

D2577-7 WEARSHOE

BREAK ALL SHARP CORNERS 0.010 TO 0.020  
MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570  
SERIES STEEL 0.063 THICK  
FINISH: POWDER COAT GREY (4.3.5.6) PER DART QSI 005 4.3  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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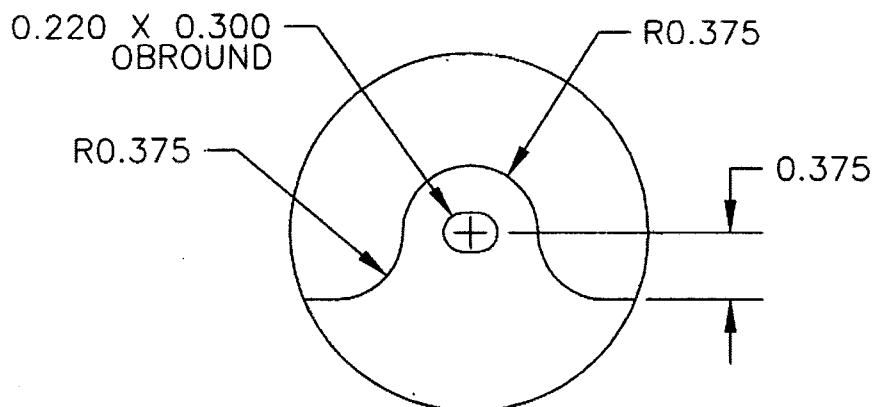
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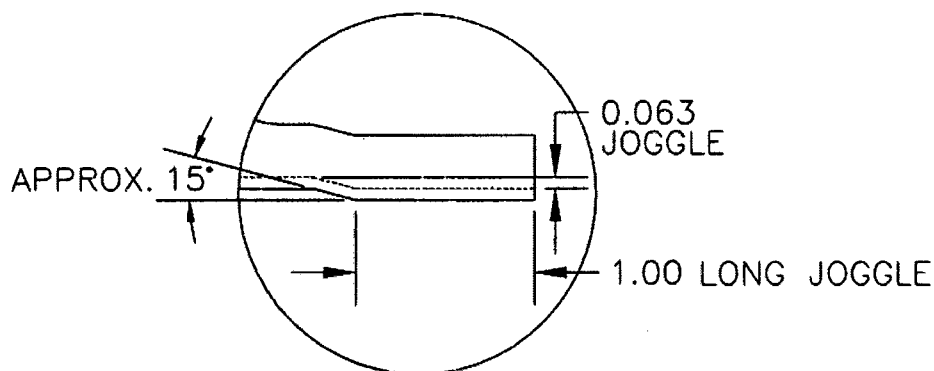
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00.09.22

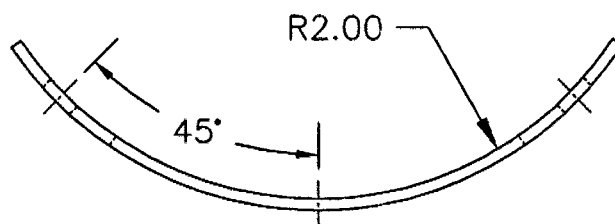
DETAIL B (SCALE 1:1)



DETAIL C (SCALE 1:1)



SECTION D-D (SCALE 1:1)



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